first of the second direction, a magnetic field being provided in a direction perpendicular to the first and second directions.

6. (Amended) A gyroscope according to Claim 1, wherein at least one of the connection arrangements comprises at least one suspension beam extending between the proof mass and the frame.

7. (Amended) A gyroscope according to Claim 1, wherein at least one of the constituent gyroscopes comprises an anchor, the frame of the constituent gyroscope being connected to the anchor.

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10. (Amended) A gyroscope according to Claim 8, further comprising means to vary the distance between the positioner and the frame.

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13. (Amended) A gyroscope according to Claim 1, wherein one of at least one of the pairs of elements is located on the frame of the respective constituent gyroscope, the other of the at least one of the pairs of elements being located on the proof mass of the respective constituent gyroscope.

14. (Amended) A gyroscope according to Claim 8, wherein one of the pair of elements on the at least one constituent gyroscope is located on the positioner, the other of the pair of elements being located on the frame of the at least one constituent gyroscope.

15. (Amended) A gyroscope according to Claim 1, wherein at least one of the constituent gyroscopes comprises a further proof mass.

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17. (Amended) A gyroscope according to Claim 1, wherein the sensed relative motion between each of the pairs of elements is used to maintain a predetermined distance between the elements of each pair of elements.

18. (Amended) A gyroscope according to Claim 1, wherein the respective pairs of elements are adapted to sense motion in collinear directions.

A5 23. (Amended) A gyroscope according to Claim 20, wherein the frame and the proof mass are connected to one another by the connection arrangement such that, during oscillation of the proof mass in the second direction, the proof mass suffers an angular deflection with respect to the frame.

A6 25. (Amended) A gyroscope according to Claim 19, wherein one of the pair of elements comprises a quantum tunnelling sensing tip, the other of the pair of elements comprising an electrode.

26. (Amended) A gyroscope according to Claim 19, further comprising a positioner located adjacent the frame.

A7 29. (Amended) A gyroscope according to Claim 27, wherein means are provided to vary the distance between the positioner and the frame.

A8 32. (Amended) A gyroscope according to Claim 26, wherein one of the pairs of elements is located on the positioner, the other pair of elements being located on the frame.

33. (Amended) A gyroscope according to Claim 19, wherein one of the pair of elements is located on the frame, the other of the pair of elements being located on the proof mass.

A9 36. (Amended) A gyroscope according to Claim 29, wherein the one of the pair of elements that is located on the frame is located near the end of the anchor which is not connected to the anchor.